

**To:** Mikucki, Brian F[Brian\_Mikucki@oxy.com]  
**Cc:** Nickerson, Jay[jay.nickerson@dep.nj.gov]; Zamek, Erika[erika.zamek@wsp.com]  
**From:** Naranjo, Eugenia[/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=2750668DAD234568B362F5305009F38D-NARANJO, EUGENIA]  
**Sent:** Mon 6/14/2021 8:16:06 PM (UTC)  
**Subject:** RE: DASS OU1- EPA Remedy Evaluation Report Comments-Path Forward

Brian,  
We agree that the summary captures what was discussed on the call, but we have concerns that the path forward (system optimization) described is insufficient and have recommendations for additional options that should be explored. We will pass along comments and recommendations along with any recommendations from the NRRB on this topic.  
Thanks,  
eugenia

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**From:** Mikucki, Brian F <Brian\_Mikucki@oxy.com>  
**Sent:** Monday, June 14, 2021 8:06 AM  
**To:** Naranjo, Eugenia <Naranjo.Eugenia@epa.gov>  
**Cc:** Nickerson, Jay <jay.nickerson@dep.nj.gov>; Zamek, Erika <erika.zamek@wsp.com>  
**Subject:** RE: DASS OU1- EPA Remedy Evaluation Report Comments-Path Forward

Good Morning Eugenia,  
  
Just checking in on this to see if we have any resolution on the comments below.  
  
If we need to discuss further let me know.  
  
Thanks

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**From:** Mikucki, Brian F  
**Sent:** Thursday, June 3, 2021 2:33 PM  
**To:** [Naranjo.Eugenia@epa.gov](mailto:Naranjo.Eugenia@epa.gov)  
**Cc:** 'Nickerson, Jay (DEP)' <[Jay.Nickerson@dep.nj.gov](mailto:Jay.Nickerson@dep.nj.gov)>; Zamek, Erika <[erika.zamek@wsp.com](mailto:erika.zamek@wsp.com)>  
**Subject:** RE: DASS OU1- EPA Remedy Evaluation Report Comments-Path Forward

Hi Eugenia,  
  
Just checking in on this to see if there is agreement with our approach on the outstanding RER comments.  
  
Let me know if we need to discuss.  
  
Thanks

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**From:** Mikucki, Brian F  
**Sent:** Monday, May 17, 2021 10:19 AM  
**To:** [Naranjo.Eugenia@epa.gov](mailto:Naranjo.Eugenia@epa.gov)  
**Cc:** Nickerson, Jay (DEP) <[Jay.Nickerson@dep.nj.gov](mailto:Jay.Nickerson@dep.nj.gov)>; Zamek, Erika <[erika.zamek@wsp.com](mailto:erika.zamek@wsp.com)>  
**Subject:** DASS OU1- EPA Remedy Evaluation Report Comments-Path Forward

Good Morning Eugenia,  
  
As a follow up to our call on Monday 5/10, below is a summary of the RER EPA Comments which were discussed on the call, and GSH proposed path forward. Please let me know if the team is in agreement. If so, we will address the comments in the revised RER.

Should there be any additional questions, please let me know.

**EPA Comment #3, #68 and #69-** expansion of RER to include impacts to native soil beneath organic silt layer

Deep groundwater contamination is a regional issue with multiple different responsible parties.

The deep aquifer is not part of the OU1 interim remedy

We acknowledge that the first draft of the RER included language which suggested that the off-site contamination was solely from off-site sources. As such, GSH agrees to revise the RER to more clearly state that the deep groundwater contamination, while not part of the remedy, is a regional issue with comingled plumes (including DASS).

**EPA Comment #36- Project Funding and Staffing**

As noted during the call, a Feasibility Study does not require the identification of a remedy's funding source or the means of staffing the remedial action activities. The current remedy will continue to be adequately staffed by GSH and funding will continue to be maintained in a Financial Assurance mechanism as required in Section XVIII of the Consent Decree.

**EPA Comment #80 and #84c- Domestic Waste Disposal Facilities**

EPA noted that an F020 listing for the waste material on the site may be more appropriate than the F027 listing suggested in the RER. GSH will review the definitions of both waste listings and confirm which waste listing is most appropriate for DASS waste. The RER will then be revised accordingly.

**EPA Comment #84d – Phase Excavation Approach**

GSH identified the difficulty of implementing a phased excavation approach near the floodwall due to the presence of tie-rods, tie-backs, buried bulkheads and deadmen. GSH will revise the RER to better describe these obstacles and the logistical challenges they create.

**EPA Comment #13 and #32-Off-Site Contamination Sources:**

There are multiple lines of evidence that suggest the contamination in the glaciofluvial sand is likely a result of the comingling of contaminants from DASS with contaminants from offsite sources. The RER will be revised to discuss comingled plumes versus solely off-site sources.

As discussed on the call, GSH will review potentiometric maps prepared by others for neighboring properties relative to those prepared for DASS to determine whether a combined potentiometric map of the upper glaciofluvial sand unit covering a larger regional extent can be developed. Findings will be documented in the revised RER as appropriate.

**EPA Comment #28 – Potential Migration to Domestic Well:**

GSH will revise the well search figure in the revised RER to correct the location of the domestic well that was the subject of this comment. As noted during the call, this domestic well was incorrectly shown to be located north of the Passaic River when, based on the block and lot listed on the well record, it is actually located south of the river.

**EPA Comment #30.2- Head Differential**

The comment asked the following: was the head differentials indicated by the groundwater level monitoring continuous, or did it change based on tidal or weather conditions?

As discussed on the call, the head differentials changed based on both tidal and weather conditions with greater fluctuations occurring outside the containment area. As such, the RER will be revised to better describe groundwater fluctuations inside and outside the contained area.

**EPA Comment #30.3- Upward flow vs. Downward Gradient**

GSH will revise the RER to state that one objective of the Remedy is to achieve a net upward hydraulic gradient along the floodwall since it is not possible to achieve upward gradients during certain low tide periods.

**EPA Comments #30.4- Origin of DCB and CB in GCP 1-1 and GCP 1-2:**

EPA comment asked the following question: What is the origin of CB and DCB in the sand in the vicinity of GCP 1-1 and 1-2 and how does it impact remedy?

As discussed on the call CB and DCB originate from both DASS and offsite sources. However, the occurrence of CB and DCB in the sand does not impact the ability of the remedy to meet RAOs.

GSH will revise the RER to better describe the origin of DCB and CB in the fill unit and in the sand; and clarify its lack of impact on the current remedy.

#### **EPA Comment #31- Origin of Contamination in GCP 6-3**

GSH does not agree with EPA conclusions regarding the source of the contamination at GCP 6-3, based on the potentiometric maps prepared by Chemical Waste Management consultant. As discussed on the call, a potentiometric map prepared for the CWM property shows that an offsite source can contribute to contamination at GCP 6-3.

Regardless of the source, the remedial action objectives are being achieved based on the inward gradients in this area of the Site. GSH believes no follow-up actions are required to further address this comment.

#### **EPA Comment #40, #104- Increased pumping rates**

GSH determined that the extraction wells are pumping at their maximum rates. However, GSH is continuing to evaluate other means of optimizing the drawdown at the Site and is reviewing the Site holistically to determine any areas of improvement. These optimizations include lowering pump intake elevations, increasing cycling frequency, using different pumps, real time sensors etc. The RER will be revised to include explanation of these optimizations and the result of the any evaluations.

#### **EPA Comment #85- Duration of groundwater remedy**

Due to the nature of the groundwater remedy, the duration of the remedy is determined to be indeterminate. This will be noted in the Groundwater Classification Exception Area (CEA)

#### **Other comments:**

NJDEP Recommend the establishment of a CEA for DASS. GSH agrees and will prepare an NJDEP CEA Fact Sheet for submittal to NJDEP/EPA along with other required documentation (well search, CEA maps, cross-section, etc.) for the establishment of a CEA at the Site.

**Brian Mikucki**

Site Manager



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